2 Sheets—Sheet 1.

G. S. WINSLOW.

Switch-Head Chair.

No. 201,213. Patented March 12 1878.

Fig. 1.

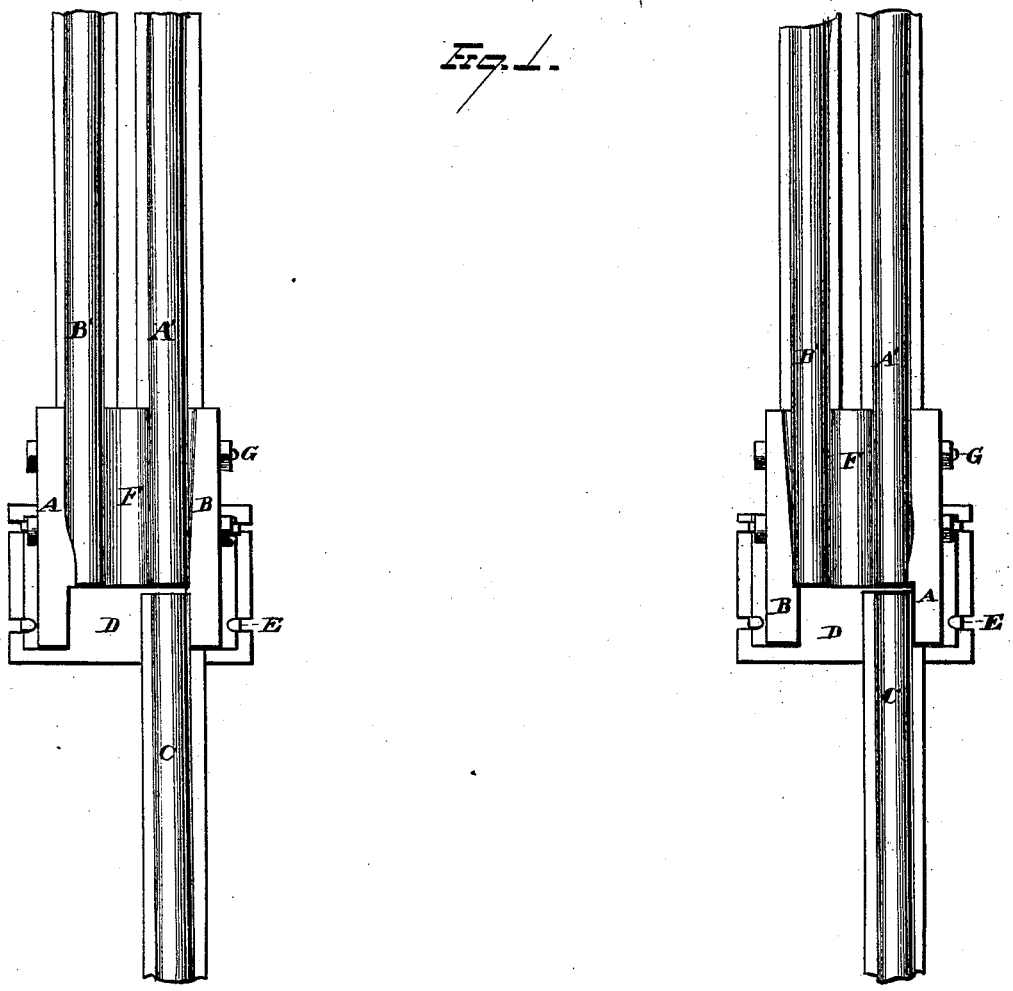
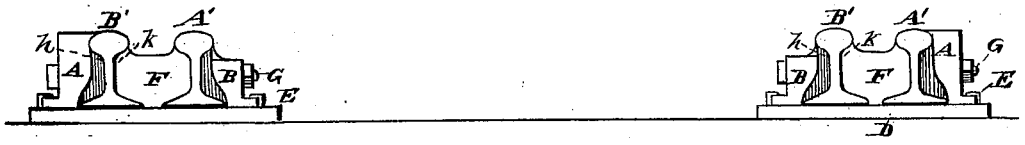


Fig. 2.



WITNESSES

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INVENTOR

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By Leggett and Leggett.

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2 Sheets—Sheet 2.

G. S. WINSLOW.

Switch-Head Chair.

No. 201,213. **Patented March 12, 1878.**

Fig. 3.

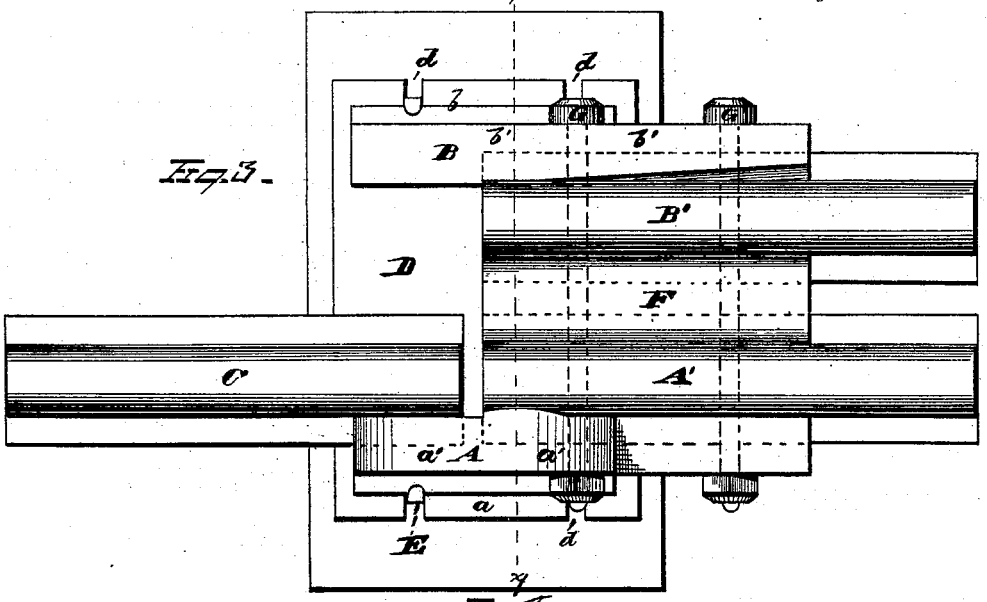


Fig. 4.

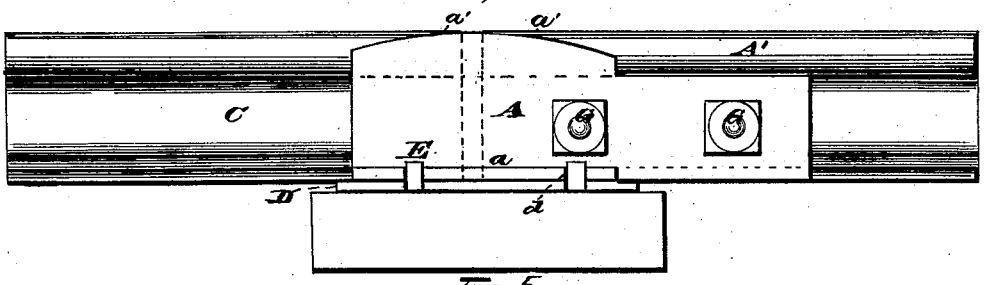
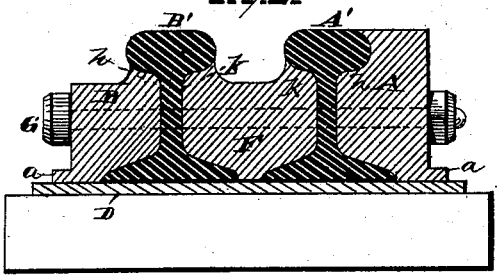


Fig. 5.



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UNITED STATES PATENT OFFICE.

GEORGE S. WINSLOW, OF CEDAR RAPIDS, IOWA.

IMPROVEMENT IN SWITCH HEAD-CHAIRS.

Specification forming part of Letters Patent No. **201,213**, dated March 12, 1878; application filed January 24, 1878.

To all whom it may concern:

Be it known that I, GEORGE S. WINSLOW, of Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Railway Head-Chairs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in railway head-chairs, more particularly that class of chairs for stub-switches which are provided each with two bearing-cheeks, one for the flange and the other for the tread of the car-wheel, so that in passing over the switch on either the main or the side track rail the car-wheels will have bearing upon the respective side cheeks of the chair.

The invention is in two parts, which consist, respectively, of constructions as follows: first, in a railway switch-chair the side bearings of which are adapted to support, respectively, the tread and flange of a wheel in passing over the main and side track rails, the combination, with the cheeks made as independent castings, having chilled treads, the rails, and the intermediate block, of the bolt or bolts which pass in horizontal transverse line through and secure the same together; second, in a switch-chair, the combination, with the bed-plate having recesses in its longitudinal sides, of the side castings provided with base-flanges, whereby the two may be readily connected by spikes or similar engaging mechanism.

Referring to the drawings, Figure 1 is a plan view of a switch containing my invention. Fig. 2 is an end view of the siding and main-track rails, held in position by head-chairs of my construction. Fig. 3 is a plan view of my improved head-chair and its group of rails. Fig. 4 is a side elevation, and Fig. 5 a cross-section, of the same through line *x y* of Fig. 3.

The two sides or cheeks of the chair are made as independent castings, with their wearing-faces suitably chill-hardened, the one, A, of height such as will allow the tread of the wheel to be borne thereon in passing over the switch on main rail A′, while the opposite side or cheek B is of height adapted to receive the flange of the wheel when passing on the side-track rail B′.

The surface of cheek A may be of any desired character; but, preferably, I make it longitudinally inclined on either side of the cross-line passing through the opening between the main and the switch rail. This gives a gradual rise, *a′*, on either side of the switch-joint, so that the wheel will easily pass on and off the raised cheek-bearing. Cheek B is preferably made with the same double incline; and its surface may be longitudinally grooved or channeled, corresponding to the flange of a wheel, or not, as desired.

Switch or throw rail C is adapted to move with little friction upon the bed-plate D, which latter is made of wrought-iron, and is in thickness but one-half of an inch, more or less. It is also preferably made with the recesses *d* in each of its longitudinal sides, to receives spikes E. The heads of said spikes engage over the flanges *a* and *b*, formed on the outer longitudinal sides of the two side castings at their base portions.

The block F is cast of proportions to fit in between the main and the side track rails, and conform to their T construction, so that it may give lateral support to the said rails, and also serve to give vertical support to their respective treads.

Bolts G pass through the web of the main and side track rails, the intermediate block, and the side castings, the same being suitably secured by nuts or similar engaging means.

A chair thus formed of independent sections is easily put up, and upon wear of any of its parts the bolts may be unfastened and the proper duplicate part substituted therefor at little expense and without loss of time or serious interruption of traffic, while, by making each of the cheek-castings with the lateral formation *h* on their respective sides next the rail, together with the corresponding lateral projection *k* on either longitudinal side of block F, a closely-jointed structure is obtained, which gives lateral bearing to the main and side track rails on their inner and outer longitudinal sides, and also a vertical bearing to their respective treads.

I am aware that it is not new with me to make a switch-chair with side bearings of dif-

ferent height, and adapted to provide support, respectively, for the tread and flange of a wheel as the latter passes over the switch on either the main or the side track rail.

I desire to be understood as disclaiming the broad features, first, of making a railway head-chair with bearing-cheeks of different heights, one for the flange and the other for the tread of a car-wheel, whereby, in passing over the switch on either the main or the side track rail, the wheel will have bearing upon the respective cheek of the chair; and, second, of providing such side bearings with detachable wearing-surfaces, either inclined, plane, or grooved.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a railway switch-chair whose side bearings are adapted to support, respectively, the tread and flange of a wheel in passing over the main and side track rails, the combination, with the cheeks made as independent castings, having chilled treads, the rails, and the intermediate block, of the bolt or bolts which pass in horizontal transverse line through and secure the same together, substantially as set forth.

2. In a switch-chair, the combination, with the bed-plate having recesses in its longitudinal sides, of the side castings provided with base-flanges, whereby the two may be readily connected by spikes or similar engaging mechanism, substantially as set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 14th day of December, 1877.

GEORGE S. WINSLOW.

Witnesses:
H. F. WHITE,
J. L. HARDWICK.